

Exhibit A

Expert Report of James F. Gruden, M.D.

To: Patricia A. Washienko, Esq.
From: James F. Gruden, M.D.
Re: Charu Desai v. UMass Memorial Medical Center, et al.
Date: July 30, 2021

I. Materials Reviewed

I have reviewed the 50 CT examinations and their official reports (QACH 1- 50; UMM00553- UMM00689) that were interpreted by Dr. Desai and by other radiologists in the same Department at Marlborough Hospital. After reviewing each individual CT examination blindly, I then reviewed the official report for each study and the over-reviewer's provided "log of misreads" one case at a time (UMM00695-UMM00696). I intend to offer opinions on whether Dr. Desai made significant errors; whether the other radiologists made significant errors at Marlborough Hospital; and whether the peer review process here was fair. My opinions are based on my review of the records and radiologic studies, my education and training, my knowledge of the relevant medical literature, and my experience and expertise in the field of radiology, particularly in thoracic radiology.

II. Qualifications, List of Cases, and Fee Schedule

I am a board certified radiologist. I earned a Bachelor of Arts in Economics and Pre-Professional Studies with Highest Honors in 1983 from the University of Notre Dame and my M.D. degree in 1987 from the University of Miami, School of Medicine, where I was class Valedictorian and was inducted to the Alpha Omega Alpha medical honor society. I completed my internship year in Internal Medicine at Cabrini Medical Center in New York, New York. I completed my residency training in Diagnostic Radiology (1988-1992) at the New York Hospital-Cornell Medical Center. I further completed a one-year Fellowship in Thoracic Imaging at the University of California-San Francisco.

I was thereafter appointed as Assistant Professor of Radiology in Residence at the University of California-San Francisco. From 1995 through 2000, I served as Assistant Professor of Radiology at NYU School of Medicine. In early 2000, I was appointed Associate Professor of Radiology and Internal Medicine at Emory University School of Medicine in Atlanta, Georgia. I served as the Division Director of Cardiothoracic Imaging at Emory University Hospital and Clinic and founded Emory's Biomedical Imaging and CT Post-Processing Lab. From 2005 through 2015, I was at the Mayo Clinic Arizona in Phoenix-Scottsdale, Arizona, where I served as the Director of Cardiothoracic Imaging. In January 2015, I was appointed as the Chief of the Division of Body Imaging in the Department of Radiology at Weill Cornell Medical College and at the New York-Presbyterian Hospital-Weill Cornell Campus. I further serve as a Full Professor of Radiology at Weill Cornell Medical College and Assistant Attending Radiologist at the New York-Presbyterian Hospital - Weill Cornell Campus. Through my education, training, review of the medical literature and my other professional activities, I am familiar with the standard of care as it pertains to the practice of radiology, and specifically thoracic radiology.

A copy of my CV including my last 10 years of publications is attached to this report at **Exhibit A**. A list of the cases I have testified in as a witness for the last 4 years is attached at **Exhibit B**. I further state that I am being compensated as an expert in this case at the rate of \$500 per hour. I have spent approximately 28 hours up to this point on this case at the present time.

III. Summary of Findings and Testimony

Based on my review of the scans and reports, Dr. Desai made no significant errors of interpretation and no errors in reporting and certainly there are, therefore, no errors that would affect immediate patient management or outcome. The reports are concise and accurate without significant typographical or descriptive errors. In addition, the reports do not recommend additional unnecessary imaging examinations. They are well within the expected standard of care at an urban teaching hospital. The “criticisms” of Dr. Desai’s reporting are entirely subjective, and I found none of them to be clinically significant. I elaborate further below.

Of note, all cases were submitted in a small window in early 2017, and I am not certain why this type of “targeted review” was performed. The method of peer review used here does not conform to any appropriate or well-known guidelines for a fair peer review process. This appears to be a hastily performed focused and targeted project, the need for which I do not know. I find no issues with the accuracy or content of Dr. Desai’s reports.

Specific analysis of cases interpreted by Dr. Desai, which the over-reviewer claimed were misreads, are as follows:

QACH08 R/O PE 2/4/17

The report here states that RLL and RML consolidation are unchanged since recent prior (prior CT was recent)- she did not call this rounded atelectasis, and I assume it was called round atelectasis on the prior exam (I do not have the report from that study). Regardless, the report clearly states that the appearance of the right lung has not changed.

The report mentions worsening consolidation in the LLL in the findings, but this should have been added to the impression. This is a reasonable critique, but the finding was not missed.

OVERALL: This was a PE study on an inpatient with a recent prior. The case was correctly read as no PE, no change RLL and RML consolidation, and worsening LLL consolidation. ***The impression could have added the LLL consolidation, but this is not a major interpretive error. The important findings were made and reported.***

QACH09 R/O PE 2/21/17

The report correctly states that there is no PE. It mentions a scapular fracture that I do not clearly see but there may have been added clinical information that I do not have. Pneumonia and pulmonary edema can be difficult to distinguish, especially in patients with emphysema (as in this case). The criticism is that the findings suggest pneumonia, not pulmonary edema, and that fat embolism should have been raised as a possibility. Fat embolism occurs in the setting of

long bone fracture, and I do not see that history provided (and I am not sure that your client had this history). Interestingly, the CT appearance of fat embolism looks very much like pulmonary edema so the criticism here is that fat emboli (which would look like “edema”) should have been mentioned but that pulmonary edema should not have been mentioned and the findings were more likely pneumonia. This is not a logical criticism and a patient with long bone fractures and “pulmonary edema” on a CT would be suspected clinically of having fat embolism. We do not directly see “fat embolism” on CT: we see its effects, which look like pulmonary edema.

OVERALL: *The reading on this case is well within expected standard of care.* Fat embolism, cardiogenic edema, and diffuse pneumonia can be hard to distinguish with certainty on one CT exam. This is not an uncommon problem, and I am not sure how we decide who is correct in a case such as this, but the initial report looks fine.

QACH10 R/O PE, 2/27/17

The critique here states that multifocal pneumonia and bronchitis were not clearly stated, a “major error.” The report very clearly discusses a mild multifocal pneumonia in both the Findings and Impression sections. There is also an issue because the report did not mention “bronchitis.” However, emphysema was mentioned in this report. Emphysema indicates a history of significant cigarette smoking which is basically always associated with “bronchitis.” The “bronchitis” in these patients is typically chronic and managed clinically. The scan quality is poor (breathing artifact, mentioned in report) and the exam is therefore more difficult to interpret, but again, it was correctly read as to the primary indication: no PE. We rarely mention “bronchitis” in patients with emphysema as it can be assumed to be present.

OVERALL: *I do not see the point of the criticism. The report is accurate.*

QACH11 R/O PE, 3/7/17

I am not sure what the critique here is. It refers to contusions being reported, but that was reported in Case 12, not Case 11, and in that case, I agree that they are likely not contusions. Case 12 was not read by your client according to my records. However, in Case 11, if that is really the case in question, I see no problem with the interpretation or report. Again, the scan quality is not great (breathing artifact).

OVERALL: *No discrepancy or problem with Case 11. The critique appears to apply to Case 12, which I am happy to address if needed.*

QACH30 noncontrast CT for Dyspnea, 2/25/17

A prior CT was two weeks earlier (although I do not have access to the report). The current report describes “infiltrates” in the left lung in both the Findings and Impression sections. While they are not specifically reported as NEW (as the critique states), the scan two weeks ago likely did not report this finding, and the referring physicians are able to realize that the findings are new based on the report, the clinical change in the patient, and referring to the prior scans and the prior report. Secretions in the trachea (not mentioned and raised as a criticism) are present in many patients with pneumonia (and COPD) and failure to mention this finding is not at all important in this instance. It is really a subjective decision by the radiologist as to whether this finding is significant enough to place in the report (it was not in this case). The lymph nodes may well be reactive (as stated in the criticism), but in a patient with a history of an advanced cancer, I see no problem with following these with a future CT to be sure. That is actually the standard of care in this instance.

OVERALL: *Quarrels with the use of the word “new”, the failure to mention tracheal secretions, and the critique of the recommended follow-up of mediastinal adenopathy are unfounded and based on subjective opinion. There is nothing wrong with this report.*

QACH33 noncontrast CT for air leak, 2/16/17

This is a complex patient with many findings and no prior imaging. The report accurately reports all the important findings. The criticism centers on the position of one of the chest tubes, which is in fact reported as IN THE MEDIASTINUM in both the Findings and Impression of the report, and there is documentation of a call to the clinical team discussing the results.

OVERALL: *The chest tube in question is reported as IN THE MEDIASTINUM. It is clear this means it is NOT in the pleural space. The criticism is unfounded.*

QACH34 noncontrast CT for cough and weight loss, 2/14/17

The report very clearly describes both emphysema and COPD and describes secretions in the airways. A LLL infiltrate is also reported. The critique, called minor but apparently this qualified as an impact on patient care, states that LLL pneumonia was not mentioned (it was) and that there was severe “bronchitis.” I do think that the mention of emphysema, COPD, and secretions in the airways in a patient known to be a smoker clearly means that “bronchitis” is present.

OVERALL: *The report is accurate, and no information was omitted.*

QACH38 noncontrast CT, cough and SOB, 1/7/17

The report is accurate. The important findings are reported. The criticism is that there is “large and small airways disease with air trapping.” Airway inflammation is basically always present in patients who smoke and who have emphysema and underlying small airway obstruction is also

uniform in this population. I do not see air trapping without expiratory images, which were not performed, but regardless: the patient is a smoker or former smoker with emphysema- this explains the clinical picture and I have no doubt that airway inflammation and small airway obstruction are also present- it is part of the overall smoking-related disease- reporting these things absolutely does not change management in this particular scenario.

OVERALL: *This report is fine. Criticism is inaccurate (air trapping seen only with expiratory images) and subjective.*

QACH42 CT with contrast, nodule in a patient with HEENT cancer, 2/16/17

This report is totally accurate.

The critique states that primary lung cancer is more likely than metastatic disease, and of course this is true but depends on how aggressive the HEENT cancer is and what cell type it is- this an appropriate report and stating that primary lung cancer is more likely than a metastasis absolutely does not change patient management.

The criticism that venous collaterals were not mentioned is interesting. These enhanced veins are the normal reflux of contrast down branch veins from a rapid contrast injection.

OVERALL: *This report is fine. The criticism is both unfounded and inaccurate.*

QACH50 CT with contrast, chest wall pain, 1/10/2017

This is a complex case and the discrepancies were minor and had no bearing on management. If this becomes important later, we can look more closely.

OVERALL: *No significant discrepancies on a complex case.*

* * *

The reports of the other radiologists' reads at Marlborough Hospital, however, contain numerous typographical errors, and several have interpretive errors. My findings suggest that more thorough, consistent, and unbiased peer review and quality improvement projects are needed for the other radiologists who were involved in these cases.

Specific analysis of cases interpreted by radiologists other than Dr. Desai at Marlborough Hospital follows.

QACH22 noncontrast CT to follow a lung nodule

The Findings section states that the larger peripheral nodule has increased in size, and reports another nodule but does not give a measurement or image number (both of which should be provided). In the Impression, it states that the larger peripheral nodule is stable and the more central nodule has increased 1-2 mm in size. This contradicts the statement in the Findings section. In addition, measurement error is generally considered 1-2 mm on CT of nodules, so a 1-2 mm difference would not be considered significant. The report describes “biapical fibrous change.” This actually appears consistent with an entity called pleuroparenchymal fibroelastosis (PPFE), which is not mentioned.

OVERALL: *The Findings and Impression sections are contradictory, and the nodules are not thoroughly reported or measured.* The entity of PPFE was not suggested.

QACH23 noncontrast CT to follow a lung nodule

This exam shows a few tiny nodules (that were reported previously and have not changed) that all have a typical benign appearance. The appearance, coupled with the stability since the priors, should indicate that these are benign and require no follow-up. Instead, the entire Fleischner Guidelines are attached to the report with follow-up recommendations. This is cumbersome for the patient and referring doctor to read and is also unnecessary.

OVERALL: *The nodules on CT have a benign appearance and the report should have stated that no follow-up was needed.*

QACH24 noncontrast CT to follow lung nodules

The impression states that the patient has “scattered” apical cystic disease. This CT is actually a classic example of paraseptal emphysema and bullous disease and not cystic lung disease. “Cystic lung disease” implies a whole different set of pulmonary disorders for which the diagnostic evaluation can be costly and possibly invasive (and here, unnecessary).

OVERALL: *The incorrect impression of cystic lung disease affects differential diagnosis and patient management.*

QACH25 noncontrast CT to follow lung nodules

The report describes stable tiny nodules (seen previously) and correctly states that no follow-up is needed. However, there are typos in the report, including in the Findings section where the location of the nodules is specified. This is not an acceptable report. In addition, unnecessary added tests (ultrasound of the gall bladder and kidney) were recommended for simple gallstones and renal cysts-no added imaging needed to be done.

OVERALL: *Significant typographical errors in the description of the nodules and their location- the impression of benign nodules is correct, but typos in the key sections of a*

radiology report are careless and sloppy. Unnecessary added testing was recommended for benign findings.

QACH46 CT with contrast to assess for pulmonary embolism (PE)

Emboli are reported but again, in BOTH the Findings and Impression sections, there are significant typographical errors in the description of the emboli and their location. This is indefensible as these are critical findings and these errors are extensive. This indicates that the radiologist clearly does not proof reports before signing them, and this type of report is well outside the standard of care. In addition, these small emboli would be unlikely to cause right heart strain as reported: the right ventricle is not definitely dilated. Reporting emboli with right heart strain can significantly affect patient management leading to possibly unnecessary aggressive therapy. This finding was best omitted from the report or perhaps a cardiac echo should have been recommended to asses the equivocal right heart prominence.

OVERALL: Typos in both the Findings and Impression section make the report incoherent. These are urgent findings that must be accurately documented. Here, the errors occur in two separate parts of the same report. This is again sloppy and well outside the standard of care.

In general, these radiologists do not have guidelines regarding how to structure a proper, clinically useful CT report. There is no consistency in how the reports are structured. There is little or no attention to detail in terms of proper description of abnormalities and many findings are poorly or inaccurately reported. Typos (and retained brackets from pre-filled templates) are rampant; punctuation is essentially nonexistent. These reports come across as hurried, careless, and sloppy and are often not accurate. A much more intensive QA with remediation is warranted.

* * *

Although not read at Marlborough Hospital, I also wanted to make a specific notation with regard to QACH 20:

QACH20 NONCONTRAST CT FOR DYSPNEA AND POSSIBLE TRACHEOBRONCHOMALACIA

The report in this case is far outside any standard. First, the clinical order specifically requested inspiratory and expiratory imaging to assess for suspected tracheobronchomalacia. The inspiratory/expiratory CT technique was not mentioned in the technique description of the report (although it was in fact performed), and the images actually DO SHOW this pathologic condition with collapse of the central airways on the expiratory imaging and areas of air trapping also on expiration, hallmarks of this diagnosis. Instead, the report mentions “no evidence of

tracheobronchial calcinosis.” This is a totally different entity and was not part of the clinical indication- this entity is insignificant and causes no symptoms. These errors show a fundamental failure of understanding of the indication for the scan, the technique used, and the findings of the pathologic entity. Even worse, read the report in the Findings section under the sub-heading “Lungs.” This is absolute gibberish- part of this appears to be a section of a report on a totally different examination for a different patient, and the section is filled with typos and incoherent sentence structure. Obviously, the radiologist also failed to proofread the report prior to signing it.

OVERALL: *This report is a disaster in every way. The clinical question was ignored, there is no mention of the collapse of the airways or air trapping (which are key to the real diagnosis in this case), the report is filled with significant typographical errors, and the significant pathology was totally missed. The radiologist obviously does not know what tracheobronchomalacia is or what the findings are, and he or she did not bother to look it up or ask someone else- this is sloppy, careless, unprofessional, and unacceptable. A report like this at my institution would result in immediate disciplinary action.*

IV. Expert Opinions

Based on my interpretation of the CT scan images and corresponding reports, which were listed in the over-reviewer’s findings as containing misreads by Dr. Desai, I have formed an opinion to a reasonable degree of certainty that Dr. Desai made no significant errors of interpretation and no errors in reporting. Certainly there are, therefore, no errors that would affect immediate patient management or outcome and/or that would justify termination.

Based on my interpretation of the CT scan images and corresponding reports, which were listed in the over-reviewer’s findings as having been read by radiologists other than Dr. Desai at Marlborough Hospital, I have formed an opinion to a reasonable degree of certainty, that those reports contain numerous, significant, and inexplicable typographical errors and several significant interpretive errors. Other reports recommended unnecessary additional imaging examinations to evaluate insignificant findings. The reports of those studies conducted by other radiologists fell outside a reasonable standard.

Finally, based on my experience as a radiologist at a major hospital and the apparent methodology of the instant review (i.e., that all of the cases were submitted in a small window in early 2017), I have formed an opinion to a reasonable degree of certainty, that the method of peer review used in this case does not conform to any appropriate or well-known guidelines for a fair peer review process.

SIGNED UNDER THE PAINS AND PENALTIES OF PERJURY ON THIS DAY OF
JULY 28, 2021.

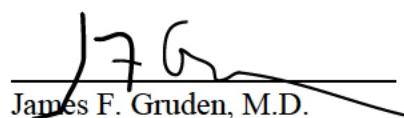

James F. Gruden, M.D.

Exhibit A

Revised: 6/1/21

A. GENERAL INFORMATION

Name: James Franklin Gruden

Office Address: 525 E 68 Street, Box 141, Room L-019, NY, NY 10065

Home Address: 15 E 26 Street #12C, NY, NY 10010

Cell Phone: 917-251-9252

Email: jfg9007@med.cornell.edu

Citizenship: USA

Date of Birth: 07/16/60

Place of Birth: Sandusky, OH

Marital Status: Single

Race: Caucasian

B. EDUCATIONAL BACKGROUND

Certificate, Executive Healthcare Management
E-Cornell, 2021

MD University of Miami
Miami, FL
09/83-05/87
MD, 1987

BA University of Notre Dame
Notre Dame, IN
08/79-05/83
BA, Economics and Preprofessional Studies, 1983

C. PROFESSIONAL POSITIONS AND EMPLOYMENT

POSTDOCTORAL TRAINING

Fellow, Thoracic Imaging
University of California-San Francisco
San Francisco, CA
Directors: W. Richard Webb, MD and Gordon Gamsu, MD
07/01/92-06/30/93

Resident, Diagnostic Radiology
New York Hospital -Cornell Medical Center and Cooperating Hospitals
New York, NY

07/01/88-06/30/92

Intern, Internal Medicine
Cabrini Medical Center- New York Medical College
New York, NY
07/01/87-06/30/88

ACADEMIC POSITIONS

Professor of Clinical Radiology
Weill Cornell Medicine
New York, NY
01/11/15-present

Associate Professor of Radiology
Mayo Clinic College of Medicine
Phoenix-Scottsdale, AZ
10/02/04-1/10/15

Adjunct Professor of Biomedical Engineering
Georgia Institute of Technology
Atlanta, GA
07/01/02-10/01/04

Associate Professor of Radiology and Internal Medicine
Emory University School of Medicine
Atlanta, GA
01/02/00-10/01/04

Assistant Professor of Radiology
NYU School of Medicine
New York, NY
11/01/95-01/01/00

Assistant Professor of Radiology in Residence
University of California-San Francisco School of Medicine
San Francisco, CA
07/01/93-10/31/95

HOSPITAL POSITIONS

Attending Radiologist
Division Director, Cardiothoracic Imaging
New York Presbyterian-Weill Cornell Medical Center
New York, NY

01/11/15-present

Attending Radiologist
Division Director, Body and Cardiothoracic Imaging
New York Presbyterian-Weill Cornell Medical Center
New York, NY
01/11/15-01/01/2020

Consultant Radiologist
Director, Cardiothoracic Imaging
Mayo Clinic and Mayo Clinic Hospital
Phoenix-Scottsdale, AZ
10/01/07-01/10/15

Senior Associate Consultant Radiologist
Mayo Clinic and Mayo Clinic Hospital
Phoenix-Scottsdale, AZ
10/02/04-10/01/07

Attending Radiologist
Division Director, Cardiothoracic Imaging
Director, Biomedical Imaging Laboratory
Emory University Hospital and Clinic
Atlanta, GA
01/02/00-10/01/04

Attending Radiologist
NYU Medical Center
Bellevue Hospital Center
New York, NY
11/01/95-01/01/00

Attending Radiologist
Chief, Thoracic Imaging
San Francisco General Hospital
San Francisco, CA
07/01/93-10/31/95

D. LICENSURE, BOARD CERTIFICATION, MALPRACTICE

LICENSES

New York	174823 (active)
North Carolina	2021-01926 (active)
Arizona	33278

Florida ME89033
California G73732
Georgia 046967

DEA Number: BG3334466 (active)

BOARD CERTIFICATION

Diplomate, American Board of Radiology 1992 (MOC participant)
Diplomate, National Board of Medical Examiners 1988

MALPRACTICE INSURANCE

MCIC of Vermont
Premiums paid by: Weill Cornell Medicine

E. PROFESSIONAL MEMBERSHIPS

American College of Radiology
Society of Thoracic Radiology
American College of Chest Physicians
American Roentgen Ray Society
Radiologic Society of North America

F. HONORS AND AWARDS

Editor's Recognition Award "With Distinction"
Manuscript Reviews, *Radiology*
1994, 1995, 1996, 1997, 1999

Valedictorian
University of Miami School of Medicine, Miami, FL
1987

Alpha Omega Alpha Honor Society
University of Miami Chapter, Miami, FL
1986, 1987

Graduation With Highest Honors
University of Notre Dame, Notre Dame, IN
1983

Phi Beta Kappa
University of Notre Dame Chapter, Notre Dame, IN
1983

G. INSTITUTIONAL/HOSPITAL AFFILIATION

1. Primary Hospital Affiliation: New York Presbyterian-Weill Cornell Medical Center
2. Other Hospital Affiliations: New York Presbyterian-Lower Manhattan Hospital, Brooklyn Methodist Hospital
3. Other Institutional Affiliations: None

H. EMPLOYMENT STATUS

1. Current employer: Weill Cornell Medicine
2. Employment status: Full time salaried by Weill Cornell Medicine

I. CURRENT AND PAST INSTITUTIONAL RESPONSIBILITIES AND CURRENT PERCENT EFFORT

Teaching 10% effort

Medical Students:

Weill Cornell:

Participate in the active teaching and engagement of students of all levels on Chest Radiology

Emory:

Directed and supervised all elective Cardiothoracic Imaging rotations for senior students

UCSF:

Monthly didactic lectures on chest radiology to third and fourth year students

Residents:

Weill Cornell:

Direct the top-ranked rotation by residents (now five consecutive years)
Responsible for Cardiothoracic and Body Imaging rotation structure, content
(Cardiothoracic only after 1/01/2020)
Daily CT and radiograph readout with residents on Cardiothoracic Imaging rotation
Didactic lectures to Pulmonary Medicine residents and fellows
Participate in didactic Cardiothoracic conference series

Mayo Clinic Arizona:

Didactic monthly lectures to residents (new residency began 2014)
Daily readout CT and chest radiographs with residents on service (final 4 months only)

Emory:

Redesigned the Radiology Resident rotations (4 residents each month)
Instituted a Cardiac Imaging rotation for senior residents
Instituted "Imaging" as a monthly session in the Pulmonary Medicine Conference series
Daily CT and Chest film readout with residents
Twice monthly noon conferences
Formal lecture series on Cardiothoracic Imaging
Board Review sessions to fourth year residents scheduled each spring
Supervised all Cardiothoracic Imaging rotations and electives

NYU:

Daily CT and chest film readout with residents, Bellevue Hospital Center
Didactic resident conferences 6-8 times per year
Board review conferences each spring

UCSF:

Daily CT, Chest film readout with residents
Didactic conferences weekly to residents at San Francisco General Hospital
Board Review sessions (at least 3 per year) for fourth year residents
Participant, annual Mock Oral Boards Examination

Clinical Care 60% effort

Weill Cornell:

Redesigned all rotations in Body and Cardiothoracic Imaging
Lead Radiologist in weekly multidisciplinary Thoracic Oncology Conference
Lead Radiologist in weekly Pulmonary Medicine Conference
Lead Radiologist in monthly Interstitial Lung Disease CT/Pathology Conference
Took over CT/PET Service for primary chest malignancies
Initiated remote reading of Chest CTs from NYP-Brooklyn Methodist
Established remote read from home options for the Division
Redigned and constantly update Chest CT protocols at inpatient and outpatient sites
Responsible for all aspects of daily clinical Body (until 1/01/2020) and Cardiothoracic Imaging Services
Established the Lung Nodule Consult Service for outpatients
Co-direct the Lung Cancer Screening Program
Supervise all aspects of clinical scheduling
Growth from 2 to 9 full time Cardiothoracic radiologists (and 3 Cardiology imagers)
Completely built the Cardiothoracic Imaging Division that currently exists

Mayo Clinic Arizona:

Redesigned workflow and created technologist-driven protocols

Chest and cardiac CT protocols, quality control, and interpretation
Implemented routine workstation use in CT with PACS integration
Involved with planning, staffing, recruitment and did all clinical scheduling
Oversaw growth from 2 to 6 full time Cardiothoracic radiologists
Established flexible scheduling that spread to the rest of the Department

Emory:

Inherited a service that interpreted plain films only
Instituted lung cancer and coronary calcification screening programs
Established and led weekly multidisciplinary Chest Conference Thursday mornings
Developed all Chest CT protocols at Emory University Hospital and Clinic
Complete control over Divisional scheduling and workflow
Established flexible scheduling for the section
Founder, Biomedical Imaging Lab
Established financial independence of the Imaging Lab
Established Emory as the first Luminary Site for Image Processing (GE)
Established office space at Georgia Tech BME with link to Imaging Lab
Built the comprehensive Cardiothoracic Imaging service that exists at Emory today

NYU:

Designed and implemented computerized database for Chest Radiology Section
Participated in daily ICU radiology conference, Bellevue and NYU Medical Center
Redesigned clinical coverage schedules

UCSF:

Ran the Chest Radiology Service independently at San Francisco General Hospital
Participated in daily Pulmonary Medicine Work Rounds
Participated in weekly Pulmonary Medicine Conference
Performed all intrathoracic interventions

Administrative duties 10% effort

Weill Cornell:

Director Cardiothoracic Imaging 2015-present
Director, Body Imaging 2015-2020
Program Education Committee
Executive Committee (all Division Directors and the Chair)
Committee of Review (Promotions Committee)
Resident Selection Committee

Mayo Clinic Arizona:

Education Committee (2104-departure)
Director, Cardiothoracic Imaging (2007-2012, time-limited)

Emory:

Director, Cardiothoracic Imaging
Director and Founder, Biomedical Imaging Lab (BIL), Emory/Georgia Tech
New Horizons Committee
Finance Committee
Resident Review Committee
Executive Committee

NYU:
Utilization Management Team Leader, Radiology Reengineering Project (1997-1999)

UCSF:
Chief, Thoracic Imaging Section, San Francisco General Hospital
Clinical Practice Guidelines Committee, San Francisco General Hospital (1995-1996)
General Clinical Research Center Advisory Committee, San Francisco General Hospital (1994-departure)
Radiology Resident Selection Committee, University of California-San Francisco (1993-departure)

Research interests 20% effort

Primary experience is in the area of cardiothoracic CT, CT protocol optimization, and CT image post-processing. Specific interests center on high-resolution imaging of diffuse lung disease and the imaging findings in infiltrative lung disease, imaging of the pulmonary vasculature, and lung cancer screening and post-treatment assessment. Other activities and interests include workflow optimization, clinical operations, and involvement of the radiologist in direct patient communication. Recently, enjoy focusing on problems and pitfalls in current trend to rely solely on "expert" consensus recommendations as the foundation for practice without critical analysis. Currently focused on long-term pulmonary sequelae of Covid-19 infection.

J. RESEARCH SUPPORT

2021: Co-Investigator and Lead Radiologist, Boehringer-Ingelheim Clinical Study
COVID-related Pulmonary Complications
Lead Investigator: Rob Kaner MD
Funded 20% salary support for one year
Weill Cornell Medicine

2012: PI MCA 1542-11
Lo dose CT with MBIR in the assessment of diffuse lung disease: comparison with conventional high resolution images (5% salary support)
General Electric Medical Systems
Mayo Clinic Arizona

2004: PI General Electric Medical Systems Grant
Coronary CTA-Cardiac Catheterization Correlative Imaging
Funded for 3 years, direct costs \$150,000
Emory University Department of Radiology

2001: PI Coulter Foundation Biomedical Engineering Grant
CAD in the Detection of Pulmonary Nodules
Funded for 1 year, direct costs \$100,000
Emory University Department of Radiology
Biomedical Imaging Lab

1995: CoPI AIDS Clinical Research Center Grant
CT of the thymus in HIV-infected patients: comparison to normal controls
Funded for 1 year, total costs \$20,000
University of California-San Francisco School of Medicine

1994: PI Society of Thoracic Radiology Seed Grant
HRCT in HIV infected patients after negative sputum induction for PCP
Funded for 1 year, total costs \$12,000
University of California-San Francisco School of Medicine

K. EXTRAMURAL PROFESSIONAL RESPONSIBILITIES

Committees:

Body Imaging Economics Committee
American College of Radiology, 2016-2018
Chair, 2018-present

MOC Exam Question Editor
American Board of Radiology, Thoracic Imaging
2018-present (renewed 3-year term 2020)

Member, STR Health and Wellness Committee
2019-present

Diagnostic Radiology Exams Standard-Setting Committee
American Board of Radiology
2019

MOC Exam Question Writer
American Board of Radiology, Thoracic Imaging
2017-2018

Manuscript and Abstract Reviewer:

AJR, 1992-2004, 2015-present
Journal of Thoracic Imaging, 2015-present
European Radiology, 2019-present
Chest, 2019-present
American Journal of Respiratory and Critical Care Medicine, 2019-present
Abstract reviewer, American Roentgen Ray Society Annual Meeting, 2014-present
Clinical Imaging, 2015-2018 (Section Editor, Cardiothoracic Imaging)
Radiology, 1992-2003

NIH Study Sections:

2005:
NIH Grant Reviewer
RFA-HL-04-031
HIV and the Lung

2002:
Special Emphasis Panel, National Heart, Lung and Blood Institute
National Institutes of Health, Washington DC
RFA HL-02-005
Novel Biomarkers of Chronic Obstructive Pulmonary Disease

2001:
Special Emphasis Panel, National Heart, Lung, and Blood Institute
National Institutes of Health, Washington DC
RFP NHLB-HR-01
Severe Asthma Consortium Development

1999:
Special Emphasis Panel, National Heart, Lung, and Blood Institute
National Institutes of Health, Washington DC
RFP NHLB-HR-99-01
Clinical Centers for Feasibility Studies on Retinoid Treatment of Emphysema

Invited Lectures:

2021: American College of Chest Physicians
“CT in Fibrotic ILD Part 1”
“CT in Fibrotic ILD Part 2”
“CT in Acute Pulmonary Embolism”
To be recorded as Enduring Educationl Content for ACCP Members

2021: American Roentgen Ray Society Annual Meeting

“Improving the Diagnosis of UIP”
Virtual live stream due to CoVID-19

2020: American College of Chest Physicians
“CT in the Diagnosis of PFILD”
Virtual live webinar due to CoVID-19

2020: American Roentgen Ray Society Annual Meeting
“CT in the Diagnosis of UIP: Outside the Guidelines”
To be recorded due to COVID-19

2020: Society of Thoracic Radiology Annual Meeting
“CT in the Diagnosis of UIP: Improving the Existing Guidelines”
Recorded due to COVID-19

2020: Cardiothoracic Imaging Society of New York
“CT Observations in Fibrotic ILD”
New York, NY

2020: Columbia University, Visiting Professor
“The Incidental Lung Nodule”
“Current Chest Cases of Interest”
New York, NY

2019: John Evans Annual Symposium, Weill Cornell Medicine
“Radiology Taking Responsibility: the Incidental Nodule Clinic”
New York, NY

2019: Long Island Radiologic Society
“CT in Fibrotic Lung Disease”
Jericho, NY

2019: Multidisciplinary Pulmonary Pathology Course
Memorial Sloan Kettering Cancer Center
“CT and Interstitial Fibrosis: UIP, CHP, NSIP”
New York, NY

2019: Hyman Senturia 25th Annual Memorial Lecture
“CT in Progressive-Fibrotic Interstitial Lung Disease (P-FILD)”
Mallinckrodt Institute of Radiology
St. Louis, MO

2019: Symposium on the Diagnosis and Management of Lung Cancer
American College of Chest Physicians Course

“The Incidental Nodule: Fleischner Applications”
“Issues in Imaging: Non-solid Nodules, CT/PET, and Lung-RADS”
“Cases and Tumor Board”
Chicago, IL

2018: Symposium on the Diagnosis and Management of Lung Cancer
American College of Chest Physicians Course
“The Incidental Nodule: Fleischner Applications”
“Issues in Imaging: Non-solid Nodules, CT/PET, and Lung-RADS”
“Cases and Tumor Board”
Chicago, IL

2017: American Roentgen Ray Society Annual Meeting
Categorical Course Speaker
“CT and the Incidental Lung Nodule”
Washington, DC

2017: Society of Thoracic Radiology Annual Meeting
“Dendriform Pulmonary Ossification”
Austin, TX

2016: American Roentgen Society Annual Meeting
Invited Keynote Speaker
“Improving the Diagnosis of UIP”
Los Angeles, CA

2016: Society of Thoracic Radiology Annual Meeting
“Holes in the Lung: Time to Revisit Old Definitions”
Scottsdale, AZ

2015: Society of Thoracic Radiology Annual Meeting
“Improving the radiologic diagnosis of UIP”
Carlsbad, CA

2014: Mayo Clinic Imaging Course and Self-Assessment Course
“CT and Pulmonary Arterial Hypertension”
“Interesting Thoracic CT Cases”
Laguna Niguel, CA

2014: Educational Symposia (ESI) Meeting
“CT of idiopathic interstitial lung disease”
“CT of PE: new observations”
“Non-neoplastic smoking-related lung disease”
Aspen, CO

2014: CT International Symposium
“CT of idiopathic interstitial lung disease”
“CT and pulmonary hypertension”
“Smoking-related lung disease”
“Case based approach to interstitial lung disease”
Madrid, Spain

2013: Golnick Symposium Lectures
“CT and the diagnosis of UIP/IPF: diagnostic features”
Lake Bled, Slovenia

2012: Radiology International Course
“Radiation dose reduction strategies in cardiothoracic CT”
“Smoking-related lung disease”
“Coronary CTA”
“Clinical cardiac MRI”
“Cardiothoracic cases”
Valencia, Spain

2011: Mayo Clinic Diagnostic Radiology Course
“CT and interstitial lung disease”
“Interesting chest cases”
Laguna Niguel, CA

2010: UCSF Diagnostic Imaging Course
“Cardiothoracic CT cases”
“Coronary CTA: how and when”
“Non-neoplastic smoking-related lung disease”
“CT of interstitial lung disease”
Cancun, Mexico

2008: RSNA
Refresher Course: Emerging technologies
“MDCT: after the scan”
Chicago, IL

2008: IAME Medical Meetings
“Pitfalls in cardiac CT”
“Cardiac CT: urgent or emergent?”
“MDCT of pulmonary embolism”
“Pulmonary hypertension: the role of MDCT”
Las Vegas, NV

2008: Orange County (CA) Radiology Society
“CT of idiopathic ILD”

“Cardiac CT: urgent or emergent?”
“Management of the solitary lung nodule”
Irvine, CA

2007: North American Society of Cardiac Imaging (NASCI)
“Pitfalls in coronary CTA interpretation”
Washington, DC

2007: Educational Symposia (ESI)
Cardiovascular CT
“Cardiac CT: urgent or emergent?”
“Pulmonary arterial hypertension”
“Cardiac CT postprocessing and data management”
Las Vegas, NV
2007: RSNA
Refresher Course: Emerging technologies
“MDCT: after the scan”
Chicago, IL

2007: American College of Chest Physicians (ACCP) Review Course
“Chest radiology I”
“Chest radiology II”
Scottsdale, AZ

2007: American Roentgen Ray Society
“Clinically relevant thoracic CT postprocessing”
Orlando, FL

2007: Italian Congress on Interstitial Lung Disease
“HRCT: patterns and diagnoses”
“Radiologic approaches to ILD”
Rome, Italy

2007: Educational Symposia (ESI)
Cardiovascular CT
“Cardiothoracic CT in the ER”
“CT and pulmonary embolism: new observations”
“Pulmonary arterial and venous hypertension”
Vail, CO

2007: Mayo School of Continuing Education
Updates in Imaging
“ILD: CT-pathologic correlates”
“Non-neoplastic smoking-related lung disease”
Kona, HI

2006: Mayo School of Continuing Education
Update in Rheumatology
“HRCT in connective tissue disorders”
Victoria, BC, Canada

2006: Symbion Healthcare Annual Meeting
“Cardiac CT Part One: Acquisition”
“Cardiac CT Part Two: Interpretation”
“MDCT of pulmonary embolism: new observations”
Gold Coast
Queensland, Australia

2006: RSNA
Refresher Course
“Post-processing MDCT data sets: applications”
Chicago, IL

2006: American Roentgen Ray Society
“Clinically relevant thoracic CT postprocessing”
Vancouver, BC, Canada

2006: Mayo School of Continuing Education
Multidisciplinary Update in Pulmonary and Critical Care Medicine
“MDCT of the airways”
Scottsdale, AZ

2006: Society of Thoracic Radiology
“Coccidioidomycosis”
Orlando, FL

2006: NYU Department of Radiology
Body Imaging in the Caribbean
“Pulmonary hypertension”
“CT and the diagnosis of thrombo-embolic disease”
“Interstitial lung disease: radiologic-pathologic correlation”
“Chest CT cases”
St. John, US Virgin Islands

2005: Stanford University Symposium on Multidetector CT
Workstation Showdown Presenter
General Electric Advantage Windows Workstation
San Francisco, CA

2005: Mayo School of Continuing Education
Multidisciplinary Update in Pulmonary and Critical Care Medicine
“Role of CT angiography in acute and chronic pulmonary embolic disease”
Scottsdale, AZ

2005: Society of Body Computed Tomography Annual Meeting
Workstation Showdown Presenter
General Electric Advantage Windows Workstation
Miami Beach, FL

2005: University of California (Davis)
3D Imaging Amongst the Temples
“Thoracic CTA: acute PE and aortic disease”
“Thoracic CTA: pulmonary arterial and venous hypertension”
“Cardiothoracic image processing tools”
Cancun, Mexico

2005: American Roentgen Ray Society Annual Meeting
Categorical Course, Cardiopulmonary Imaging
“Pulmonary CTA: Techniques and Pitfalls in Interpretation”
New Orleans, LA

2005: Yale University School of Medicine
Radiology Grand Rounds
“CT of Pulmonary Thrombo-embolic Disease: New Concepts”
New Haven, CT

2005: Long Island College Hospital
Radiology Grand Rounds
“CT of Pulmonary Embolism: Techniques and Pitfalls”
Brooklyn, NY

2004: Boston University School of Medicine
Radiology Grand Rounds
“Cardiothoracic Image Processing Applications”
Boston, MA

2004: Bridgeport Hospital-Yale New Haven Health System

Radiology Grand Rounds
“Cardiac MDCT Techniques and Future Applications”
Bridgeport, CT

2004: Educational Symposia (ESI)
Cardiovascular CT 2003: What You Need to Know
“Image processing tools”
“Pulmonary arterial and venous hypertension”
Las Vegas, NV

2004: National Conference on Venous Thromboembolism
GE Medical Systems-Asia
“MDCT of Acute and Chronic Pulmonary Embolism”
Beijing, China

2004: Stanford University Symposium on Multidetector CT
“How workstations have changed the way I read images”
San Francisco, CA

2004: American Roentgen Ray Society Annual Meeting
Refresher Course Speaker
“MDCT of pulmonary thromboembolism”
Miami Beach, FL

2004: Society of Thoracic Radiology
“Image processing applications in the thorax”
Rancho Mirage, CA

2004: University of California (Davis)
3D Imaging Amongst the Temples
“Thoracic CTA: acute PE and aortic disease”
“Thoracic CTA: pulmonary arterial and venous hypertension”
“Cardiothoracic image processing tools”
“CT coronary assessment: calcium and contrast”
Cancun, Mexico

2004: Emory University School of Medicine
Radiology Grand Rounds
“Cardiac MDCT: calcium scoring and beyond”
Atlanta, GA

2003: Educational Symposia (ESI)
Cardiovascular CT 2003: What You Need to Know

"Image processing tools"
"Pulmonary arterial and venous hypertension"
"Cariopulmonary MDCT cases"
Las Vegas, NV

2003: American Roentgen Ray Society Annual Meeting
Refresher Course Speaker
"Multi-detector pulmonary CTA"
San Diego, CA

2003: American Roentgen Society Annual Meeting
General Electric Medical Systems Seminar
"3D Imaging: enhancing the radiologist-clinician relationship"
San Diego, CA

2003: Institute for Advanced Medical Education (IAME)
Clinical Essentials of CT and MRI
"Workstation applications in thoracic CT"
Hands-On Workstation Training Sessions
Las Vegas, NV

2003: Society of Thoracic Radiology Annual Meeting
"Multi-detector CT angiography"
Miami Beach, FL

2002: Solitary Pulmonary Nodule Working Seminar
"Dynamic CT of pulmonary nodules"
"Case studies: functional assessment of the SPN"
Banff, Alberta, Canada

2002: American Roentgen Ray Society Annual Meeting
Refresher Course Speaker
"Multi-channel CT and venous thromboembolic disease: new directions"
Atlanta, GA

2001: Brown University School of Medicine
Radiology Grand Rounds
"MDCT in lung nodule detection: new applications"
Providence, RI

2001: Southeastern Interventional Radiology Society
"MDCT in pulmonary embolism"
Atlanta, GA

2001: Educational Symposia (ESI)

Multislice CT

"MDCT in nodule detection"

"MDCT in nodule characterization"

"HRCT with MDCT: concepts of diagnostic accuracy"

New York, NY

2001: Society of Thoracic Radiology Annual Meeting

"MDCT in pulmonary embolism: new applications"

Boca Raton, FL

2001: Emory University School of Medicine

Radiology Grand Rounds

"MDCT in pulmonary embolism"

Atlanta, GA

2000: Emory University School of Medicine

Surgery Grand Rounds

"CT in pulmonary embolism"

Atlanta, GA

2000: Albert Einstein School of Medicine

Radiolgy Grand Rounds

"Nodule localization on HRCT"

Bronx, NY

2000: Montefiore Medical Center

Radiology Grand Rounds

"Nodule localization on HRCT"

Bronx, NY

2000: Mt. Tabor (Brazil) School of Medicine

Seminars in Pulmonology

"HRCT: anatomy and terminology"

"Pulmonary infections"

"Pulmonary embolism: imaging tools"

"HRCT: specific diagnoses and diagnostic accuracy"

Salvador, Bahia, Brazil

2000: UCSF Department of Radiology

Body Imaging with CT and MRI

"CT in "R/O PE": application and interpretation"

"Pitfalls in HRCT interpretation"

"CT-HRCT assessment of nodular lung disease"

"UIP, DIP, IPF, BOOP, BO, NSIP, ETC."

Palm Springs, CA

1999: Maine Medical Center
Kjeldgaard Seminar on Interstitial Lung Disease
"Concepts of accuracy of HRCT in interstitial lung disease"
"Nodule localization on HRCT"
Portland, ME
1999: NYU Department of Radiology
CT and MRI Head-to-Toe
"Can HRCT obviate lung biopsy?"
"Nodule localization on HRCT"
New York, NY

1999: Society of Thoracic Radiology Annual Meeting
"Nodule localization algorithm using HRCT"
Amelia Island, FL

1999: Mt. Sinai Medical Center
Occupational Medicine Grand Rounds
"Use of HRCT in pneumoconiosis"
New York, NY

1999: Mt. Sinai Medical Center
Pulmonary Medicine Grand Rounds
"Can HRCT obviate biopsy?"
New York, NY

1999: Thomas Jefferson Medical College
Radiology Grand Rounds
"Nodule localization on CT/HRCT"
Philadelphia, PA
1998: NYU Department of Radiology
Postgraduate Radiology in Puerto Rico
"Clinical indications for HRCT"
"Pitfalls in HRCT interpretation"
"CT of focal lung disease"
Dorado, PR

1998: NYU Department of Radiology
CT and MRI Head-to-Toe
"HRCT: Can it obviate lung biopsy?"
"Nodule localization on CT/HRCT"
New York, NY

1998: UCSF Department of Radiology
Body Imaging in Paradise
"How to read HRCT"

"Pitfalls in HRCT interpretation"
"CT of the airways: large and small"
"CT of focal lung disease"
Kona, HI

1998: New York Roentgen Society Spring Conference
"Pitfalls in HRCT Interpretation"
New York, NY

1997: International Infectious Disease Congress
"Use of HRCT in AIDS"
"Imaging the complications of HIV disease: new observations"
"Imaging of pleuroparenchymal infections"
"Imaging in AIDS"
Rosario, Argentina

1997: NYU Department of Radiology
CT and MRI Head-to-Toe
"CT/HRCT in AIDS"
"Pitfalls in HRCT interpretation"
New York, NY

1997: UCSF Department of Radiology,
Body Imaging in Paradise
"Helical CT of the airways"
"CT/HRCT of nodular lung disease"
"HRCT: pattern approach"
"Applications of helical CT including embolic disease"
"Radiology in the world of managed care"
Kona, HI

1997: Montefiore Medical Center and Jacobi Medical Center
Albert Einstein University School of Medicine
Radiology Grand Rounds
"Pitfalls in HRCT interpretation"
Bronx, NY

1997: Emory University Department of Radiology
Radiology Grand Rounds
"Classics in chest CT"
Atlanta, GA

1996: Society of Thoracic Radiology Annual Meeting
"AIDS-related neoplasms"
Kona, HI

1996: UCSF Department of Radiology
Diagnostic Radiology Seminars
"Pulmonary complications of AIDS"
"CT of nodular lung disease"
"Pleuroparenchymal infections"
"CT of the airways"
"Basic HRCT Interpretation"
Maui, HI

1996: New York Roentgen Society Spring Conference
"Noninfectious complications of AIDS"
New York, NY

1996: UCSF Department of Radiology
Body Imaging in Paradise
"Utility of HRCT and interpretive pitfalls"
"CT of nodular lung disease"
"CT of the airways"
"HRCT: a simple approach to interpretation"
Kona, HI

1996: NYU Department of Radiology
CT and MRI Head-to-Toe
"Chest CT utilization in HIV-AIDS"
New York, NY

1996: UCSF Department of Radiology
Imaging in AIDS/Trauma
"Pulmonary Infections in AIDS"
"AIDS-related neoplasms"
"Pleuroparenchymal infection"
San Francisco, CA

1996: Albany Medical College
Radiology Grand Rounds
"CT of the airways"
"CT of nodular lung disease"
Albany, NY

1995: LSU School of Medicine
Radiology Grand Rounds
"CT of the airways"
New Orleans, LA

1995: Society of Thoracic Imaging Annual Meeting
"AIDS-related thoracic neoplasms"
Amelia Island, FL

1995: UCSF Department of Radiology
Resident Review Course
"Pulmonary infections"
San Francisco, CA

1995: UCSF Department of Radiology
Radiology Spring Training
"HRCT findings in airways disease"
"Imaging of chest disease in AIDS"
"CT/HRCT and nodular lung disease"
Phoenix, AZ

1995: South Central Kansas Radiology Society
"Clinical utility of HRCT"
"Imaging the thoracic complications of AIDS"
Wichita, KS

1995: UCSF Department of Radiolg,
Annual Postgraduate Course in Diagnostic Imaging
"Pitfalls in HRCT interpretation"
San Francisco, CA

1995: UCSF Department of Radiology
Imaging in AIDS and Trauma
"Pulmonary infections in AIDS"
"AIDS-related neoplasms"
"Pulmonary infections in the emergency room"
San Francisco, CA

1995: UCSF Department of Radiology
Body Imaging in Paradise
"HRCT: how to read it and when to do it"
"Features and value of HRCT in airways disease"
"Imaging and diagnosis in HIV-related chest disease"
"CT in the evaluation of nodular lung disease"
Kona, HI

1995: UCSF Department of Radiology
Practical Body Imaging

"CT/HRCT in AIDS"
Monterey, CA

Organization of National or International Conferences:

2021: Moderator, "Cystic Lung Disease"
Society of Thoracic Radiology Annual Meeting
Live Webinar due to CoVID-19

2016: Moderator, Chest Scientific Sessions
American Roentgen Society Annual Meeting
Los Angeles, CA

2015: Moderator, "Chest Imaging" Session
American Roentgen Ray Society Annual Meeting
Toronto, Canada

2010: Moderator, "Thoracic Oncology" Session
European Society of Thoracic Imaging Annual Meeting
Bern, Switzerland

2007: Moderator, "Advanced MDCT in the Thorax" Course
American Roentgen Ray Society Annual Meeting
Orlando, FL

2006: Moderator, "Noncardiac Applications of Chest MDCT" Course
American Roentgen Ray Society Annual Meeting
Vancouver, BC, Canada

2004: Moderator, "3D and Functional Imaging" Session
Society of Thoracic Radiology Annual Meeting, Rancho Mirage, CA

1999: Moderator, "High Resolution CT" Session
Society of Thoracic Radiology Annual Meeting, Amelia Island, FL

1995: Course Co-Director, "Imaging in AIDS" CME Course
University of California-San Francisco Department of Radiology

L. BIBLIOGRAPHY

1. Original Articles:

Escalon JG, Legasto AC, Toy D, **Gruden JF**. Central paradiaphragmatic middle lobe involvement in nonspecific interstitial pneumonia. *Eur Radiol*. 2021 Feb 23. doi: 10.1007/s00330-021-07741-z. Epub ahead of print. PMID: 33624164.

Groner LK, Green DB, Weisman SV, Legasto AC, Toy D, **Gruden JF**, Escalon JG. Thoracic Manifestations of Rheumatoid Arthritis. *Radiographics* 2021;41(1):32-55.

McLaren TA, **Gruden JF**, Green DB. The bullseye sign: A variant of the reverse halo sign in COVID-19 pneumonia. *Clin Imaging* 2020 Jul 28;68:191-196. Online ahead of print. PMID: 32853842

Gruden JF, Naidich DP, Machnicki SC, Cohen SL, Girvin F, Raoof S. An Algorithmic Approach to the Interpretation of Diffuse Lung Disease on Chest CT Imaging. *Chest* 2020;157(3):612-635.

Green DB, Legasto AC, Port J, **Gruden JF**. CT features of lung parenchymal invasion in malignant thymoma. *Eur Radiol* 2019; 29(9):4555-4562.

Shostak E, Rasheed A, Jessurun J, **Gruden JF**. A diagnostic conundrum: progressive tubular lung mass in an asymptomatic young female. *Chest* 2019; 155(5):e131-e135.

Wu X, Kim GH, Salisbury ML, Barber D, Bartholmai BJ, Brown KK, Conoscenti CS, De Backer J, Flaherty KR, **Gruden JF**, Hoffman EA, Humphries SM, Jacob J, Maher TM, Raghu G, Richeldi L, Ross BD, Schlenker-Herceg R, Sverzellati N, Wells AU, Martinez FJ, Lynch DA, Goldin J, Walsh SLF. Computed tomographic biomarkers in Idiopathic Pulmonary Fibrosis. the future of quantitative analysis.. *Am J Respir Crit Care Med*. 2019; 199(1):12-21.

Green DB, Pua BB, Crawford CB, Abby GN, Drexler IR, Legasto AC, **Gruden JF**. Screening for lung cancer: communicating with patients. *AJR* 2018; 210(3):497-502.

Gruden JF, Green DB. Reply to "Appropriate timing for follow-Up CT imaging for stable lung CT screening reporting and data system Category 3 lesions identified at baseline low-dose CT. *AJR* 2018; 211:W302.

Escalon JG, Wu X, Drexler IR, Lief L, Plataki M, Bender M, **Gruden JF**. Rare case of pulmonary involvement in an adult with Kawasaki disease. *Clin Imaging* 2018; 47:1-3.

Gruden JF, Green DB, Legasto AC, Jensen EA, Panse PM. Dendriform pulmonary ossification in the absence of usual interstitial pneumonia: CT features and possible association with recurrent acid aspiration. *AJR* 2017; 209:1209-1215.

Green DB, Legasto AC, Drexler IR, **Gruden JF**. Pulmonary fibrosis on the lateral chest radiograph: Kerley D lines revisited. *Insights Imaging* 2017; 8:483-489.

Gruden JF. CT in Idiopathic Pulmonary Fibrosis: diagnosis and beyond. *AJR* 2016; 206:495-507.

Libby LJ, Narula N, Fernandes H, **Gruden JF**, Wolf DJ, Libby DM. Imatinib Treatment of Lymphangiomatosis (Generalized Lymphatic Anomaly). *J Natl Compr Canc Netw* 2016;14(4):383-386.

Gruden JF, Panse PM, Gotway MB, Jensen EA, Wellnitz CV, Wesselius L. Diagnosis of Ususal Interstitial Pneumonitis in the absence of honeycombing: evaluation of specific CT criteria with clinical follow-up in 38 patients. *AJR* 2016; 206(3):472-80.

Jaroszewski DE, Notrica DM, McMahon LE, Hakim FA, Lackey JJ, **Gruden JF**, Steidley DE, Johnson KN, Mookadam F. Creative management of acquired thoracic dystrophy in adults after open pectus excavatum repair. *Ann Thorac Surg* 2014; 97:1764-70.

Oanikkath R, Costilla V, Hoang P, Wood J, **Gruden JF**, Dietrich B, Gotway MB, Appleton C. Chest pain and diarrhea: a case of *Campylobacter jejuni*-associated myocarditis. *J Emerg Med* 2014; 46:180-83.

Swink J, Panse PM, **Gruden JF**, Jensen EA, Wesselius L. Tubular pulmonary opacities detected at chest radiography: an unusual etiology. *Clin Pulm Med* 2014; 21:150-53.

Panse PM, Jensen EA, **Gruden JF**, Gotway MB. Hyperattenuating lung parenchyma: a rare diagnostic consideration. *Clin Pulm Med* 2014; 21:104-06.

Gruden JF, Panse PM, Leslie KO, Tazelaar H,T, Colby TV. HRCT features of UIP diagnosed at open lung biopsy 2000-2009. *AJR* 2013; 200:458-467.

Hakim FA, **Gruden JF**, Panse PM, Alegria JR. Coronary artery ectasia in an adult with Noonan syndrome detected on coronary CT angiography. *Heart Lung Circ* 2013; 22:1051-53.

Pandit A, Panse PM, **Gruden JF**, Gotway MB. Pulmonary artery sheath hematoma with pulmonary arterial compression: a rare complication of type A dissection mistaken for aortitis. *Eur Heart J* 2013; 34:3459.

Pandit A, Panse PM, Aryal A, **Gruden JF**, Gotway MB. A new intracavitory lesion at echocardiography and MR: a case of mistaken identity. *Int J Cardiovasc Imaging* 2013; 29:1203-05.

Morris MF, Suri RM, Akhtar NJ, Young PM, **Gruden JF**, Burkhardt HM, Williamson EE. Computed tomography as an alternative to catheter angiography prior to robotic mitral valve repair. *Ann Thorac Surg* 2013; 95:135-39.

Panse PM, **Gruden JF**, Viggiano RW, Smith ML, Gotway MB. Multiple ground-glass opacity pulmonary nodules: an unusual thoracic CT appearance of a rare diagnosis. *Clin Pulm Med* 2013; 20:199-201.

Jaroszewski DE, Lam-Himlin D, **Gruden JF**, Lidner TK, Etxebarria AA, DePetris G. Plexiform leiomyoma of the esophagus: a complex radiographic, pathologic, and endoscopic diagnosis. *Ann Diagn Pathol* 2011; 15:342-46.

Leslie KO, **Gruden JF**, Parish JM, Scholand MB. Transbronchial biopsy interpretation in the patient with diffuse parenchymal lung disease. *Arch Pathol Lab Med* 2007; 131:407-23.

Gruden JF. Thoracic CT performance and interpretation in the multi-detector era. *J Thorac Imaging* 2005; 20(4):253-64.

Gruden JF, Tigges S, Baron M, Pearlman H. MDCT pulmonary angiography: image processing tools. *Semin Roentgenol* 2005; 40:48-63.

Gruden JF, Ouanounou S, Tigges S, Norris SD, Klausner TS. Incremental benefit of maximum intensity projection (MIP) images on observer detection of pulmonary nodules revealed by multidetector CT. *AJR* 2002; 179:149-157.

Gruden JF, Campagna G, McGuinness G. Variable CT appearance of the bronchial stump and second carina after left upper lobectomy. *J Thorac Imag* 2000; 15:138-143.

Gruden JF, Webb WR, Naidich DP, McGuinness G. Anatomic localization of multinodular disease on high-resolution CT (HRCT): evaluation of a simple algorithm. *Radiology* 1999; 210:711-720.

McGuinness G, **Gruden JF**. Viral and *Pneumocystis carinii* infections of the lung in the immunocompromised host. *J Thorac Imag* 1999; 14:25-36.

McGuinness G, **Gruden JF**, Garay SM, Naidich DP. Thoracic complications of AIDS: imaging findings and diagnostic strategies. *Sem Resp Crit Care Med* 1998;19(5):543-560.

Gruden JF, Naidich DP. HRCT: can it obviate lung biopsy? *Clin Pulm Med* 1998; 5(1):23-35.

Gruden JF, Huang L, Turner J, Webb WR, Merrifield C, Stansell J, Gamsu G, Hopewell PC. High-resolution CT in the evaluation of clinically suspected *Pneumocystis carinii* pneumonia in AIDS patients with normal, equivocal, or nonspecific radiographic findings. *AJR* 1997; 169:967-975.

Naidich DP, **Gruden JF**, McGuinness G, McCauley DI, Bhalla M. Volumetric (helical/spiral) CT (VCT) of the airways. *JTI* 1997; 12: 11-28.

McGuinness G, **Gruden JF**, Naidich DP, Jagardar J, Harkin T, Bhalla M. AIDS-related airways disease. *AJR* 1997; 168: 67-77.

Bhalla M, Naidich DP, McGuinness G, **Gruden JF**, Leitman BS, McCauley DI. Diffuse lung disease: assessment with helical CT- preliminary observations of the role of maximum and minimum intensity projection images. *Radiology* 1996; 200:341-347.

Murray JG, Caoli E, **Gruden JF**, Evans SJ, Halvorsen RA, Mackersie RC. Acute rupture of the diaphragm due to blunt trauma: diagnostic sensitivity and specificity of CT. *AJR* 1996; 166: 1035-1039.

Huang L, Schnapp LM, **Gruden JF**, Hopewell PC, Stansell JD. Presentation of AIDS-related pulmonary Kaposi's sarcoma diagnosed by bronchoscopy. *Am J Respir Crit Care Med* 1996; 153: 1385-1390

Gruden JF, McGuinness G. Pitfalls in HRCT interpretation. *Crit Rev Diag Imag* 1996; 37(5): 349-434.

Gruden JF, Huang L, Webb WR, Gamsu G, Sides DM, Hopewell PC. AIDS-related pulmonary Kaposi's sarcoma: radiographic findings with bronchoscopic correlation. *Radiology* 1995; 195:545-552.

Gruden JF, Webb WR, Yao DC, Sandhu JS, Klein JS. Bronchogenic carcinoma in HIV-seropositive patients: clinical and radiographic findings. *J Thorac Imag* 1995; 10:99-105.

Gruden JF, Webb WR. Identification and evaluation of centrilobular opacities on high-resolution CT. *Sem Ultrasound, CT, MRI* 1995; 16 (5):435-449.

Gruden JF, Webb WR, Sides DM. Disseminated tracheobronchial papillomatosis: HRCT features. *J Comput Tomogr* 1994;18(4):640-642.

Gruden JF, Webb WR. CT findings in a proved case of respiratory bronchiolitis. *Search Pulmonol* 1994;4(2):8-9.

Gruden JF, Webb WR, Warnock M. Centrilobular opacities in the lung on HRCT: diagnostic considerations and pathologic correlation. *AJR* 1994; 162:569-574.

Gruden JF, Stern EJ. Bilateral pneumothorax after percutaneous lung biopsy: evidence for incomplete pleural fusion. *Chest* 1994; 102(2):627-628.

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Abstract and Presentation, European Respiratory Society

Barcelona, Spain

2012:

Gruden JF, Panse PM, Gotway MB, Wellnitz CV.
“UIP without honeycombing: HRCT features”
Abstract and Presentation, European Society of Thoracic Imaging
London, UK

2011:

Gruden JF, Panse PM.
“Dendriform pulmonary ossification: clinical correlates”
Scientific Poster and Presentation, European Respiratory Society
Amsterdam, The Netherlands

Gruden JF, Panse PM.
“CT features in dendriform pulmonary ossification”
Scientific poster and presentation, European Society of Thoracic Imaging
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Gruden JF, Panse PM.
“Dual energy GSI (gemstone spectral imaging) in comparison to conventional dynamic CT in pulmonary nodule assessment: initial observations”
Abstract abd Presentation, European Society of Thoracic Imaging
Bern, Switzerland

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1997:

Gruden JF, Huang L, Swanson MS, Turner J, Merrifield C, Hopewell PC.

"Chest radiograph-based probability classification for possible *Pneumocystis carinii* pneumonia (PCP) in patients with AIDS: prospective evaluation in 392 patients"

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Chicago, IL

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1996:

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Chicago, IL

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Abstract and Presentation, American Roentgen Ray Society

Washington, DC

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“Pitfalls in HRCT interpretation”

Scientific Exhibit, American Roentgen Ray Society

Washington, DC

Oldham SAA, **Gruden JF**.

AIDS-related neoplasms: can we tell them apart?

Scientific Exhibit, RSNA

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“Pitfalls in HRCT interpretation”

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Huang L, Schnapp LM, **Gruden JF**, Hopewell PC, Stansell JD

“Clinical and radiographic presentation of pulmonary Kaposi's sarcoma”

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1993:

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Abstract and Presentation, Society of Thoracic Radiology

Hilton Head, SC

Gruden JF, Klein JS

“The thoracic manifestations of AIDS and HIV disease”

Exhibit, American Roentgen Ray Society

San Francisco, CA

Exhibit B

Below is a list of all cases in which, during the previous 4 years, I have testified as an expert at trial or by deposition.

1. In 2018, I testified as an expert in the matter of *Ingram v. Blanco*; and
2. In 2019, I testified as an expert in the matter of *Bosco v. Staten Island University Hospital*.

Exhibit B

In the Matter of:
Charu Desai vs
UMASS Memorial Medical Center, Inc., et al.

James F. Gruden, M.D.

August 31, 2021

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<p style="text-align: right;">Page 45</p> <p>1 Q. So the logs that you kept on your review 2 of the CT, all of the information and the notes, 3 your impressions that you took, you memorialized and 4 provided to your attorneys?</p> <p>5 MS. WASHIENKO: Objection.</p> <p>6 A. Yes.</p> <p>7 Q. And so after receipt of this e-mail 8 July 13th, 2020, you did what you just described 9 and provided that information on your review to 10 Dr. Desai's counsel, is that right?</p> <p>11 MS. WASHIENKO: Objection.</p> <p>12 A. Yes.</p> <p>13 THE WITNESS: Sorry. Patricia, are 14 you saying something?</p> <p>15 MR. SWEENEY: I'm just objecting for 16 the record, Dr. Gruden.</p> <p>17 THE WITNESS: Okay.</p> <p>18 Q. But your answer was "Yes," Dr. Gruden?</p> <p>19 A. Yes.</p> <p>20 Q. And it says, again, in this -- the fourth 21 paragraph of this e-mail, "We're particularly 22 interested in the studies labeled as" and then it 23 lists some studies. In your review, you reviewed 24 all 50, is that right?</p>	<p style="text-align: right;">Page 47</p> <p>1 that were listed were ones with particular errors? 2 A. Just because of the nature of the case. I 3 mean, I assumed that the radiologist being 4 terminated must have been, you know, clearly not 5 doing a good job.</p> <p>6 So I thought it would be -- I honestly 7 thought it would be obvious looking at these few 8 cases, oh, gosh, these are really bad reads, but 9 that's not how it was.</p> <p>10 So I looked at all 50 cases to figure out, 11 you know, what I would have said and I looked at the 12 reports and what was said, and I found interesting 13 things on reports that weren't these.</p> <p>14 So I didn't really see a pattern unique to 15 these particular cases, and I think after the first 16 few of looking at these, I realized I didn't really 17 see a pattern so I just continued through all 50.</p> <p>18 Q. Did anyone ever tell you why they're 19 particularly interested in these ones listed?</p> <p>20 A. If they did, it would have been after I 21 already had looked at them and put my report in 22 writing and my thoughts in writing. It's probable 23 that after that point we had a conversation and they 24 made me aware of this, of which cases their client</p>
<p style="text-align: right;">Page 46</p> <p>1 A. Yes.</p> <p>2 Q. Did you pay any particular attention or do 3 anything specific to these cases that are listed 4 here?</p> <p>5 MS. WASHIENKO: Objection.</p> <p>6 A. My recollection is that I thought those 7 were going to be cases where the report was 8 particularly awful, but other than that, no.</p> <p>9 I entered this case with a very different 10 perspective. I assumed that this was going to be a 11 radiologist that was clearly an outlier and there 12 was a clear problem, so I thought I was going to 13 look at those reports and say, oh, my God, this is 14 awful.</p> <p>15 And once I got through the first few, I 16 realized that there was nothing unique about 1, 2, 8 17 and 9 that were different from any of the others, so 18 I kind of stopped focusing on the specifics of it 19 and getting just more into the case by case.</p> <p>20 I didn't pay any more attention to these 21 than any of the other 50. I looked at each scan 22 just like I was reading it myself and then looked at 23 the reports.</p> <p>24 Q. And why did you expect that these reports</p>	<p style="text-align: right;">Page 48</p> <p>1 had read because when I read these cases myself and 2 did my written reports, I -- I had no idea which 3 cases were read by their client and which cases were 4 read by other people. I didn't have that 5 information.</p> <p>6 Q. Okay. So before you had that information, 7 you reviewed all 50 cases, logged your impressions 8 of any problems or disagreements and provided that 9 to Dr. Desai's counsel, right?</p> <p>10 A. Yes, sir.</p> <p>11 (Pause.)</p> <p>12 (Exhibit 6; so marked.)</p> <p>13 Q. And I'm going to share with you another 14 exhibit, Exhibit 6. Did this come up for you?</p> <p>15 (Reviewing document.)</p> <p>16 A. It did.</p> <p>17 Q. All right. This appears to be an e-mail 18 from Dr. Desai's counsel to you dated July 28, 2020.</p> <p>19 Does that look right?</p> <p>20 A. Yes.</p> <p>21 Q. And this is a couple weeks after the 22 previous e-mail. And it starts off, "As we</p> <p>23 discussed, the spreadsheet listing which reads the</p> <p>24 University's reviewer identified as misreads is</p>

<p style="text-align: right;">Page 49</p> <p>1 attached." Do you see that?</p> <p>2 A. I do.</p> <p>3 Q. And so is this the document you referenced</p> <p>4 earlier that identifies which studies were done by</p> <p>5 which radiologist?</p> <p>6 A. Yes. It looks like that, yes.</p> <p>7 Q. And then the Attachment, UMM 695-696, this</p> <p>8 was that document, is that right?</p> <p>9 A. I would guess that's what it looks like.</p> <p>10 It's the University's reviewer statement of the</p> <p>11 cases that they felt were misread.</p> <p>12 Q. Okay. And then it -- so it starts off</p> <p>13 "As we discussed." Did you have a discussion about</p> <p>14 the --</p> <p>15 A. We had a discussion about --</p> <p>16 Q. Just wait for me to finish my question --</p> <p>17 A. Oh, I'm sorry.</p> <p>18 Q. -- even though you know what I'm asking.</p> <p>19 You had a discussion prior to receiving this e-mail,</p> <p>20 is that right?</p> <p>21 A. I would -- yes, I believe we had a</p> <p>22 discussion. We may have had multiple discussions.</p> <p>23 I can't recall. I think knowing how I do things, I</p> <p>24 probably called them about my findings before I sent</p>	<p style="text-align: right;">Page 51</p> <p>1 and looked at the expert's opinion on which were</p> <p>2 misreads and what they thought about the errors made</p> <p>3 by the client versus others.</p> <p>4 And I put that -- you know, I think</p> <p>5 there's a separate -- probably a separate</p> <p>6 communication with them that I put it in -- I put</p> <p>7 things in writing.</p> <p>8 I don't have all that in front of me right</p> <p>9 now, but I'm sure I can find it if I need to dig</p> <p>10 back through it, but, you know, this -- I would have</p> <p>11 gone through and said that I agreed or disagreed</p> <p>12 with their University's reviewer in terms of his or</p> <p>13 her opinion about these cases.</p> <p>14 And I probably -- and I was fairly</p> <p>15 detailed as to why -- why I disagreed in many cases</p> <p>16 with the University's reviewer. I was pretty clear</p> <p>17 on each case, very specific and detailed.</p> <p>18 Q. Okay. And so just to recap, initially you</p> <p>19 reviewed all 50 studies, the images and the reports;</p> <p>20 created a document where you logged any problems or</p> <p>21 disagreements you identified; then after that was</p> <p>22 done, you reviewed the findings of the UMass</p> <p>23 Memorial's reviewers and provided a document where</p> <p>24 you opined on whether you disagree -- agree or</p>
<p style="text-align: right;">Page 50</p> <p>1 the written document to them, so we would have had a</p> <p>2 conversation then and we probably had a conversation</p> <p>3 afterwards as well.</p> <p>4 The nature of the case was that, you</p> <p>5 know, information, you know, it went in a stepwise</p> <p>6 fashion, so I don't recall the number of</p> <p>7 conversations or their dates.</p> <p>8 But I do know that I -- the first time I</p> <p>9 reviewed the cases I was not aware of who read which</p> <p>10 case and I wasn't necessarily aware of their</p> <p>11 expert's opinions on them. That might have happened</p> <p>12 afterwards.</p> <p>13 Q. Okay. And then so you were provided with</p> <p>14 this spreadsheet where the reviewer provided</p> <p>15 opinions on certain reads, is that right?</p> <p>16 A. Yes. And it looks like this is also when</p> <p>17 I was notified as to which cases were read by their</p> <p>18 client and which were read by other people.</p> <p>19 Q. Okay.</p> <p>20 A. Previous to this, I was not aware of who</p> <p>21 had read what.</p> <p>22 Q. And so what did you do in response to this</p> <p>23 e-mail?</p> <p>24 A. I'm sure I went through the cases again</p>	<p style="text-align: right;">Page 52</p> <p>1 disagree with the additional reviewers' opinions?</p> <p>2 A. I -- I believe that's the sequence. You</p> <p>3 know, I'm not -- like I said, it's a long time ago.</p> <p>4 I don't recall exactly the timing, but I do -- I do</p> <p>5 know the first time I went through it I didn't know</p> <p>6 which case was read by who.</p> <p>7 I can't recall exactly when I was provided</p> <p>8 the University's reviewers' opinions, but I don't</p> <p>9 think I had them initially. I don't think I had</p> <p>10 anything initially except the reports and the scans</p> <p>11 and then I was given this further information later.</p> <p>12 Q. Okay.</p> <p>13 A. But there were multiple discussions on the</p> <p>14 phone in addition to the written documents because</p> <p>15 these cases are fairly complex in terms of the</p> <p>16 interpretations and the -- and the University</p> <p>17 reviewers' opinions.</p> <p>18 So I had to go through them in some detail</p> <p>19 with counsel to make sure they understood what I</p> <p>20 was saying, and I put it in writing in a way that</p> <p>21 was -- that we could articulate things in not</p> <p>22 necessarily, you know, a radiologist lingo but in a</p> <p>23 language that people can actually understand, so</p> <p>24 it -- it was a long process. There were a lot of</p>

<p style="text-align: right;">Page 189</p> <p>1 Q. Okay. And but you don't know the details 2 there. You don't know whether she had a specific 3 difference in her duties during that period. You 4 don't know whether it was normal. You don't know 5 anything about the answers to those questions that 6 you just raised, right?</p> <p>7 A. No, I don't know, and I also don't know 8 if she was ever previously investigated or if she 9 was given feedback and a chance to improve her 10 performance before or if this was just a one-time -- 11 the only evidence I have that led to this whole 12 thing is these 50 cases over a one-month period.</p> <p>13 Q. And with respect to the time frame, the 14 other studies that were done by other radiologists 15 are from the same period, is that right?</p> <p>16 A. I believe so. I think all the cases were 17 from the same period.</p> <p>18 Q. And you don't know when the review was 19 performed, right? You know when the cases were 20 from, but you don't know when the review was 21 performed?</p> <p>22 A. I don't know.</p> <p>23 Q. You don't know how long it took to perform 24 the review?</p>	<p style="text-align: right;">Page 191</p> <p>1 know, we do peer review every quarter and give 2 people feedback. We don't just target one person 3 for a peer review over a month of cases and make a 4 determination on them based on that.</p> <p>5 Q. So what do you mean when you say "peer 6 review"? Can you describe what you mean by that?</p> <p>7 A. Well, a "peer review" is -- is something 8 where it implies that, you know, multiple people are 9 reviewed, your peers, the people you work with, your 10 colleagues.</p> <p>11 This -- and, again, I don't know if 12 there's other information, but this documents -- the 13 documents I was given suggests that this was a 14 targeted review targeting one person and that's 15 typically not done unless -- unless there are 16 reasons that are -- and I -- and I have experience 17 with this before where there's a real impairment of 18 someone that leads them to really miss significant, 19 life-threatening findings, then you can be justified 20 in -- in targeting something because you have to do 21 something acutely, and I think that's the point I 22 was making before.</p> <p>23 This picking a short time window like this 24 and targeting like this seems to me that there was</p>
<p style="text-align: right;">Page 190</p> <p>1 A. No, I don't.</p> <p>2 Q. You mentioned that in the -- in your 3 report that it appears to be a hastily performed 4 review. What makes you think it was hastily 5 performed?</p> <p>6 A. Because the cases were from a very small 7 window of time. The -- I think it's obvious from 8 what I said in my written opinions that there was 9 nothing here that would warrant a termination.</p> <p>10 I don't know anything about any -- 11 anything about these reports. There may be other 12 factors here involved. I'm sure there are and I 13 don't know any of those.</p> <p>14 But to target a review this quickly, and I 15 wasn't given any information about any of the other 16 radiologists being subjected to the same peer review 17 and the same type of action and feedback despite the 18 fact their reports were actually worse, this 19 looked like it was all thrown together in a fairly 20 urgent basis without attention to what really 21 qualifies as an objective peer review that's fair 22 and across the board with everybody in the group and 23 representative of, you know, many different types of 24 cases and over a -- over a longer time period. You</p>	<p style="text-align: right;">Page 192</p> <p>1 something dramatic and acute that must have 2 happened, but I didn't see that in any of the 3 reports that I got. That doesn't mean it didn't 4 happen, but based on these 50 exams, I don't see 5 anything here that would warrant a targeted, urgent 6 review.</p> <p>7 Q. And, again, other radiologists were 8 included in the review as well, right?</p> <p>9 A. Yes. I don't know how many.</p> <p>10 Q. And so is it fair to say that the peer 11 review process that you're referring to is something 12 different than what this review would be?</p> <p>13 A. It seems to me, yes.</p> <p>14 Q. Okay. You don't know what UMass 15 Memorial's peer review process is, right?</p> <p>16 A. I don't. And I don't know if she's -- as 17 I said, I don't know if she's had prior peer reviews 18 that showed something or not. I -- I only have this 19 50 cases.</p> <p>20 Q. Okay. So is it fair to say that you don't 21 really know what the methodology was for the review 22 done by UMass Memorial?</p> <p>23 A. That's correct.</p> <p>24 Q. And you mentioned "the method of peer</p>

<p style="text-align: right;">Page 193</p> <p>1 review used in this case does not conform to any 2 appropriate or well-known guidelines for a fair peer 3 review process." What appropriate or well-known 4 guidelines are you referring to?</p> <p>5 A. Well, for one thing, as I said, you 6 typically don't do targeted reviews on -- on one 7 person like this. You don't do them over a 8 one-month window with a really narrow number 9 of -- small number of cases.</p> <p>10 And it's supposed to be transparent. 11 It's -- you know, our peer review is pretty 12 transparent, and you give feedback to people when 13 there's issues so they can improve their 14 performance. Everything's documented.</p> <p>15 I mean, I don't -- I don't really -- I 16 don't really see a lot of those characteristics 17 present here.</p> <p>18 Q. And, again, so does this appear to you to 19 be a review that's outside of the normal peer review 20 process?</p> <p>21 A. Yes. This is -- as I said, this appears 22 to be something that had a specific target and a 23 specific purpose, and I don't know whether that 24 purpose was justified or not, but that's just how it</p>	<p style="text-align: right;">Page 195</p> <p>1 as well because it's on a spreadsheet with her -- I 2 don't know if she had it at the time, but it came 3 across in the spreadsheet. I don't actually when 4 she reviewed them if she knew who read what.</p> <p>5 But, you know, this -- a number of the 6 discrepancies and the issues that were raised by the 7 internal reviewer, as we've discussed, I don't find 8 significant. Some of them are -- she may be right, 9 but they're subjective and they're open to 10 individual discretion in terms of whether those 11 findings should be included in reports or not.</p> <p>12 So it -- it seems like they were trying to 13 find -- trying to find errors, I guess, and trying 14 to -- trying to make proof of something because in 15 our situation, if I had -- if I was doing peer 16 review on some of these findings, I would never have 17 mentioned those as -- as a discrepancy. I -- I just 18 wouldn't have.</p> <p>19 So it's just how it comes across and, 20 again, I don't have any information. It's just for 21 me being at many institutions that I've been at and 22 the way we've done and do peer review, this is not 23 normal, not the usual way to do it.</p> <p>24 Q. And so you don't know whether the reviewer</p>
<p style="text-align: right;">Page 194</p> <p>1 comes across. I could be wrong, but this is all the 2 documentation I have and if this is all there is, 3 this looks like a targeted review that was done for 4 a reason.</p> <p>5 Q. Okay. And assuming it was a targeted 6 review done for a reason, is there anything wrong or 7 do you have any knowledge about whether there was 8 anything wrong about it?</p> <p>9 A. No. I said I have no idea about 10 Dr. Desai's performance on other cases or if there 11 was a history of problems or if there's anything 12 else that I'm -- I don't know anything about the 13 situation. My opinion is strictly about these 14 50 cases.</p> <p>15 Q. And you say that -- you reference that it 16 does not conform to guidelines for a "fair" review 17 process. Can you tell me what was not fair about 18 this process, if -- if you can?</p> <p>19 A. Well, based on my -- what I have. As I 20 said, the other radiologists are not identified in 21 terms of either name or the number of them.</p> <p>22 She's identified, you know, by name as to 23 which cases she read. And on the expert's overview, 24 their internal expert obviously had that information</p>	<p style="text-align: right;">Page 196</p> <p>1 had that spreadsheet document that you had, right?</p> <p>2 A. I don't know, and I don't know if she 3 picked the cases or who picked the cases and how 4 they -- you know, why they picked these. It's kind 5 of a random sampling from a month's period of time.</p> <p>6 And I don't know if Dr. Desai read every 7 other case correctly or whether she actually made 8 some substantial errors that didn't come through in 9 this select group of cases. I can only comment on 10 these 50.</p> <p>11 Q. So you don't know whether the reviewer 12 knew which ones were Desai's and which ones were 13 not, right?</p> <p>14 A. I don't know.</p> <p>15 Q. So not -- not knowing anything about that, 16 can you really say whether it was a fair process or 17 not based on the information you have?</p> <p>18 A. I can say it's not fair in the sense of, 19 as I said, picking one narrow window of time, the 20 limited number of cases and not really controlling 21 for the complexity of the cases between the -- that 22 Dr. Desai read versus others.</p> <p>23 It's very easy to say you disagree with 24 somebody's readings in complicated cases. It's</p>

<p style="text-align: center;">Page 197</p> <p>1 pretty hard to disagree with readings when you're 2 looking at cases that are follow-up nodule and very 3 straightforward. You're not going to find a lot of 4 discrepancies, so it's -- it's not a -- it's not a 5 real good representative -- representative group of 6 cases. I don't know how these cases were selected 7 and, as I said, it's a narrow window of time and...</p> <p>8 Q. In your report, you don't identify which 9 cases you view as complex or not complex, is that 10 right?</p> <p>11 A. I think there was a couple in hers that 12 I -- I said this is a complex case a few times. You 13 know, there's a couple of cases that were 14 postsurgical that had a lot going on. There was the 15 patient who had no priors that had cancer and 16 radiation treatment and a lot going on.</p> <p>17 So several of those cases there were 18 discrepancies that were recorded by the internal 19 reviewer, but they weren't -- as we discussed, they 20 weren't, you know, actionable errors that resulted 21 in a different management or a bad outcome or 22 anything like that. They were subjective 23 differences in -- in the reporting content.</p> <p>24 Q. So other than the couple of cases that you</p>	<p style="text-align: center;">Page 199</p> <p>1 Q. But if the reviewer was not internal at 2 UMass and did not know the identities, then you 3 can't think of any reason that -- which would lead 4 you to believe that she would have discriminated 5 against in this -- in these -- in the reviews?</p> <p>6 MR. SWEENEY: Objection.</p> <p>7 A. No. I think the -- the other question I 8 had about this peer review process was that -- we 9 didn't go through some of these cases in detail, but 10 there were a couple or three that really had major 11 issues. One in particular where the report was just 12 gibberish to read. It was completely illegible.</p> <p>13 I'm assuming that they gave peer review 14 feedback to these people about proofreading their 15 reports, you know, rather than targeting whether 16 someone mentions secretions in the trachea or not.</p> <p>17 I mean, those -- those errors -- you know, 18 I -- I don't know the remediation for that, but 19 those errors happen in more than one report over a 20 long -- over the entire month time frame, as far as 21 I remember. I didn't see any -- any intervention 22 with regard to that.</p> <p>23 Q. Is there any other work that you did on 24 this matter that we didn't discuss or did we discuss</p>
<p style="text-align: center;">Page 198</p> <p>1 identified as -- Dr. Desai's as complex, you don't 2 provide an opinion on which of the 50 you view as 3 complex and which ones you don't view as complex, 4 correct?</p> <p>5 A. Correct.</p> <p>6 Q. If the -- the reviewer who conducted the 7 review was blinded and did not know the identities 8 of the reviewing radiologist, can you think of 9 anything that would lead you to believe that that 10 person could have discriminated against Dr. Desai in 11 the review?</p> <p>12 MR. SWEENEY: Objection.</p> <p>13 A. I have no way of knowing that because I 14 don't know if the internal reviewer knew which cases 15 were read by Dr. Desai in advance.</p> <p>16 The problem with that always when you're 17 dealing with one institution is if you work in the 18 same place as someone and you have seen some of 19 these cases before and you're aware of them, you 20 know who read them.</p> <p>21 And so there is some of that recall 22 occasionally. I don't know if that was a factor 23 here either, but, no, I -- I don't really know that 24 information.</p>	<p style="text-align: center;">Page 200</p> <p>1 everything you've done as far as your review and 2 documents you produced and everything else?</p> <p>3 MR. SWEENEY: Objection.</p> <p>4 A. You have all the documents. I don't have 5 anything else. I -- I don't -- I can't think of 6 anything right now that is in addition.</p> <p>7 Q. But no other reviews or actions you took 8 that we didn't discuss?</p> <p>9 A. Not to my recollection, no.</p> <p>10 Q. And did we discuss all the opinions you 11 intend to offer at trial in this case?</p> <p>12 (Pause.)</p> <p>13 A. I believe so. We've touched on 14 everything.</p> <p>15 Q. And, again, you're not planning -- as you 16 sit here today, you're not planning to do any 17 further work or offer additional opinions that you 18 know about, right?</p> <p>19 A. Not to my knowledge.</p> <p>20 MR. WAKEFIELD: Okay. I'm just going 21 to note for the record that Dr. Gruden mentioned an 22 initial blind review that he did and created 23 documentation regarding his impressions and opinions 24 on the 50 CTs that he did blinded and provided that</p>

Exhibit C

In the Matter of:
Charu Desai vs
UMASS Memorial Medical Center, Inc., et al.

Max P. Rosen Vol II

June 01, 2021

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<p style="text-align: right;">Page 337</p> <p>1 representative. Was that Randa Mowlood?</p> <p>2 A. No. Kathleen Leblanc.</p> <p>3 Q. And you -- without disclosing what you said</p> <p>4 or what was said to you in your conversation with</p> <p>5 counsel, why did you speak with counsel?</p> <p>6 MR. WAKEFIELD: Object. Object to form.</p> <p>7 You can answer to the extent that you're</p> <p>8 not disclosing the subject matter of what was</p> <p>9 discussed; so the reason you spoke to counsel</p> <p>10 specifically you can answer.</p> <p>11 A. Well, the reason was this is an employment</p> <p>12 matter and I wanted to understand what rights</p> <p>13 Dr. Desai had under the terms of her contract.</p> <p>14 Q. You mentioned a minute ago that you were</p> <p>15 considering all of the information that was</p> <p>16 presented to you and at your fingertips, including</p> <p>17 complaints made by other people. I think you've</p> <p>18 identified or we in the course of your depositions</p> <p>19 have identified that Dr. Dill and Dr. Robinson had</p> <p>20 made complaints about Dr. Desai. Who were the other</p> <p>21 people who made complaints about her?</p> <p>22 A. A lot of the quality issues that were</p> <p>23 brought to Dr. Dill I took as a proxy for a</p> <p>24 complaint because they were issues about quality</p>	<p style="text-align: right;">Page 339</p> <p>1 BY MS. WASHIENKO:</p> <p>2 Q. I have now distributed Exhibit 64, I think.</p> <p>3 A. Okay.</p> <p>4 Q. This is Dr. Desai's notice of termination,</p> <p>5 correct?</p> <p>6 A. Correct.</p> <p>7 Q. And this is your signature in the bottom</p> <p>8 left-hand signature block?</p> <p>9 A. Yes, it is.</p> <p>10 Q. It's dated March 9, 2018, but, in fact, you</p> <p>11 did not give this to Dr. Desai on March 9, 2018,</p> <p>12 isn't that correct?</p> <p>13 A. I see that it's dated March 9th and I see</p> <p>14 that the termination date is March 17th, but I -- I</p> <p>15 don't know why there's that discrepancy between</p> <p>16 those two dates.</p> <p>17 Q. Do you recall, Dr. Rosen, that you met with</p> <p>18 Dr. Desai on March 14th, 2018, and informed her of</p> <p>19 her termination?</p> <p>20 A. I don't recall specifically.</p> <p>21 Q. In that -- in that meeting, do you recall</p> <p>22 that Dr. Desai asked the -- the reason for her</p> <p>23 termination?</p> <p>24 A. I remember meeting with Dr. Desai and I</p>
<p style="text-align: right;">Page 338</p> <p>1 raised with Dr. Dill and her role as section chief.</p> <p>2 Q. Do you know who the other people were who</p> <p>3 made the complaints about Dr. Desai?</p> <p>4 A. No.</p> <p>5 Q. When did you decide -- to the best of your</p> <p>6 memory, when did you decide to terminate</p> <p>7 Dr. Desai?</p> <p>8 MR. WAKEFIELD: Object to form.</p> <p>9 You can answer, if you can.</p> <p>10 A. Probably, in the weeks proceeding when I</p> <p>11 gave her her termination notice.</p> <p>12 Q. So, if you informed her of her termination</p> <p>13 in March of 2018, at some point in February or early</p> <p>14 March, you will have made the decision to terminate</p> <p>15 Dr. Desai, is that correct?</p> <p>16 MR. WAKEFIELD: Object to form.</p> <p>17 You can answer if you can.</p> <p>18 A. I mean, I can only speculate, but I think</p> <p>19 that's a reasonable time frame between after --</p> <p>20 after Dr. Litmanovich's independent review and</p> <p>21 issuing the termination letter.</p> <p>22 (Document marked as Exhibit 64</p> <p>23 for identification)</p> <p>24</p>	<p style="text-align: right;">Page 340</p> <p>1 remember her asking me why she was being terminated,</p> <p>2 and my answer would have been over quality issues.</p> <p>3 Q. Do you recall stating to her that you did</p> <p>4 not need a reason to fire her?</p> <p>5 A. No.</p> <p>6 Q. Do you recall that Dr. Desai asked you to</p> <p>7 provide examples of the poor quality work?</p> <p>8 A. Yes.</p> <p>9 Q. Were you able to do so in that meeting?</p> <p>10 A. I did not provide it in that meeting.</p> <p>11 Q. But you explained that you had had someone</p> <p>12 conduct an independent review, isn't that correct?</p> <p>13 A. Yes. That I had -- a blinded independent</p> <p>14 review of her work was performed.</p> <p>15 Q. Right. The termination letter which is</p> <p>16 Exhibit 64 states that Dr. Desai's employment would</p> <p>17 terminate on March 17th, 2019. Do you see that?</p> <p>18 A. Yes.</p> <p>19 Q. So a year after you informed her of her</p> <p>20 termination her employment would, in fact, be</p> <p>21 terminated?</p> <p>22 A. Correct.</p> <p>23 Q. And the -- the delay was because she was</p> <p>24 entitled to a year's notice under her contract, is</p>